



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Anderson, et al.

Serial No: 09/911,692

Filed: July 17, 2001

Title: THERAPEUTIC APPLICATION
OF CHIMERIC AND
RADIOLABELED ANTIBODIES
TO HUMAN B LYMPHOCYTE
RESTRICTED DIFFEREN-
TIATION ANTIGEN FOR
TREATMENT OF B CELL
LYMPHOMA

) Examiner: Schwadron, R.
)
)
)

) Art Unit: 1644
)
)

) Certificate of Mailing Under §1.10
)

) I, Patricia Munoz, hereby certify that this paper
) or fee is being deposited with the United States
) Postal Service as Express Mail Post Office to
) Addressee service, Express Mailing Label No.
) EL 989 437 545 US, under 37 C.F.R. § 1.10 on
) the date indicated below and is addressed to the
) Commissioner for Patents, P.O. Box 1450,
) Alexandria, VA 22313-1450 on this date.

) Date: October 21, 2003

) By: Patricia Munoz
Patricia Munoz

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants request that the information on the attached Form PTO-1449 be considered by the Office during the pendency of the above-entitled application, pursuant to 37 C.F.R. 1.97. In accordance with 37 C.F.R. 1.97(h), the filing of the Information Disclosure Statement shall not constitute an admission that any information cited therein is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b). In the interest of full and complete disclosure to the Office, some or all of the art cited herein may not be considered by Applicant(s) or the Undersigned to be material under the standards of materiality defined in C.F.R. 1.56(b), enacted March 16, 1992, as amended September 8, 2000, and may merely be technical background which may be of interest to the Examiner.

In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

Since no Office Action on the merits has issued, Applicant believes that no fee is due in connection with the filing of this Information Disclosure Statement. However, please charge any fees that may be necessary to Deposit Account No. 03-3975, Order No. 037003-0280646. A duplicate copy of this transmittal is enclosed for accounting purposes.

Respectfully submitted,

Date: October 21, 2003



Suzanne L. Biggs
Registration No. 30,158 for

Thomas A. Cawley, Jr.
Registration No. 40,944
PILLSBURY WINTHROP LLP
1600 Tysons Boulevard
McLean, VA 22102
Telephone: (703) 905-2000
Fax Line: (703) 905-2500
Direct Line: (858) 509-4095



Atty. Dkt. No.	M#	Client Ref.
	037003-0280646	1992-30-0029CP1C3

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant: Anderson, et al.	
Appln. No.: 09/911,692	
Filing Date: July 25, 2001	
Examiner: Schwadron, R.	Group Art Unit: 1644

Date: October 21, 2003 Page 1 of 3

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR	5,500,362	03/1996	Robinson, et al.	435	7.23	
BR	5,648,267	07/1997	Reff	435	320.1	
CR						

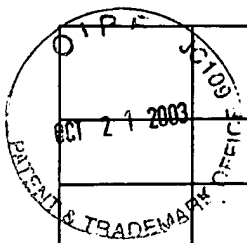
FOREIGN PATENT DOCUMENTS

		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclos	No
	DR	0 125 023 A1	11/1984	EP	Cabilly, et al.				
	ER	0 125 023 B1	11/1984	EP	Cabilly, et al.				
	FR	0 125 023 B2	03/2002	EP	Cabilly, et al.				
	GR	0 173 494 A2	03/1986	EP	Morrison, et al.				
	HR	0 274 394 A2	07/1988	EP	Robinson, et al.				
	IR	0 274 394 A3	07/1988	EP	Robinson, et al.				
	JR	0 451 216 B1	01/1996	EP	Queen, et al.				
	KR	0 682 040 A1	11/1995	EP	Queen, et al.				
	LR	0 682 040 B1	11/1995	EP	Queen, et al.				
	MR	WO 88/04936	07/1988	WO	Robinson, et al.				
	NR	WO 92/07466	05/1992	WO	Hellström, et al.				

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

	Adams, R.A. <i>et al.</i> , Direct implantation and serial transplantation of human acute lymphoblastic leukemia in hamsters, SB-2, <i>Can Res</i> 28:1121-1125 (1968).			
	Adams, Richard, Formal Discussion: The role of transplantation in the experimental investigation of human leukemia and lymphoma, <i>Can. Res.</i> 27:2479-2482 (1967).			
	Anderson, K.C., et al., Hematologic engraftment and immune reconstitution posttransplantation with anti-B1 purged autologous bone marrow, <i>Blood</i> 69(2):597-604 (1987)			
	Anderson, D.R., et al., Immunoreactivity and effector function associated with a chimeric anti-CD20 antibody, The Second Annual IBC International Conference on Antibody Engineering, Dec. 16-18, 1991.			
	Anderson, K.C., et al., Expression of human B cell-associated antigens on leukemias and lymphomas: A model of human B cell differentiation, <i>Blood</i> 63(6):1424-1433 (1984)			
	Appelbaum, F.R., Radiolabeled Monoclonal Antibodies in the Treatment of Non-Hodgkin's Lymphoma. <i>Hem. Onc. Clinics of N.A.</i> 5(5):1013-1025 (1991).			
	Armitage, J.O. <i>et al.</i> , Predicting therapeutic outcome in patients with diffuse histiocytic lymphoma treated with cyclophosphamide, adriamycin, vincristin and prednisone (CHOP), <i>Cancer</i> 50:1695 (1982).			
	Bhan, A.K., et al., Stages of B cell differentiation in human lymphoid tissue, <i>J. Exp. Med.</i> , 154:737-749 (1981)			

	Boulianne, G.L. <i>et al.</i> , Production of functional chimaeric mouse/human antibody, <i>Nature</i> 312:643 (December 1984).				
	Brunner, K.T. <i>et al.</i> , Quantitative assay of the lytic action of immune lymphoid cells on ⁵¹ Cr-labeled allogeneic target cells <i>in vitro</i> ; inhibition by isoantibody and drugs, <i>Immunology</i> 14:181-189 (1968).				
	Buchsbaum, D.J., <i>et al.</i> , A comparison of ¹³¹ I-labeled monoclonal antibody 17-1A treatment to external beam irradiation on the growth of LS174T human colon carcinoma xenografts, <i>Int. J. Radiation Oncology Biol. Phys.</i> , 18:1033-1041 (1990)				
	Buchsbaum, D.J., <i>et al.</i> , Comparative binding and preclinical localization and therapy studies with radiolabeled human chimeric and murine 17-1A monoclonal antibodies, <i>Cancer Research (Suppl.)</i> 50:993s-999s (1990)				
	Buchsbaum, D.J., <i>et al.</i> , Comparison of ¹³¹ I- and ⁹⁰ Y-labeled monoclonal antibody 17-1A for treatment of human colon cancer xenografts, <i>Int. J. Radiation Oncology Biol. Phys.</i> 25:629-638 (1993)				
	Calvert, J.E., <i>et al.</i> , Cellular events in the differentiation of antibody-secreting cells, <i>Seminars in Hematology</i> , 21(4):226-243 (1984)				
	Chomczynski, P. <i>et al.</i> , Single step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction, <i>Anal. Biochem.</i> 162:156-159 (1987).				
	Clark, E.A., <i>et al.</i> , Role of the Bp35 cell surface polypeptide in human B-cell activation, <i>Proc. Natl. Acad. Sci. USA</i> , 82:1766-1770 (1985)				
	Cope, Antibody shows promise in treating B-cell lymphoma, <i>Oncology</i> , 8(4):100 (1994)				
	DeNardo, S.J., <i>et al.</i> , Pilot studies of radioimmunotherapy of B cell lymphoma and leukemia using I-131 Lym-1 monoclonal antibody, Antibody, Immunoconjugates, and Radiopharmaceuticals, 1(1):17-33 (1988)				
	DeNardo, S.J., <i>et al.</i> , The biologic window for chimeric L6 radioimmunotherapy, <i>Cancer</i> 73(3):1023-32 (1994)				
	Dickson, Scientists produce chimeric monoclonal abs, <i>Genetic Engineering News</i> 5/3 (March 1985).				
	Eary, J.F. <i>et al.</i> , Imaging and Treatment of B-Cell Lymphoma, <i>J. Nuc. Med.</i> 31/8:1257-1268 (1990).				
	Einfeld, D.A. <i>et al.</i> , Molecular cloning of the human B cell CD20 receptor predicts a hydrophobic protein with multiple transmembrane domains, <i>EMBO</i> 7:711 (1988)				
	Golay, J.T., <i>et al.</i> , The CD20 (Bp35) antigen is involved in activation of B cells from the G ₀ to the G ₁ phase of the cell cycle, <i>J. Immunology</i> 135(6):3795-3801 (1985)				
	Goldenberg, D.M. <i>et al.</i> , Targeting, dosimetry and radioimmunotherapy of B-Cell lymphomas with iodine-131-labeled LL2 monoclonal antibody, <i>J. Clin. Onc.</i> 9/4:548-564 (1991).				
	Greenberger, J.S., <i>et al.</i> , Effects of monoclonal antibody and complement treatment of human marrow on hematopoiesis in continuous bone marrow culture, <i>Cancer Research</i> 45:758-767 (1985)				
	Hekman, A., <i>et al.</i> , Immunotherapy, The Netherlands Cancer Institute Amsterdam Annual Report, pp. 47-48 (1993)				
	Lipton, J.M., <i>et al.</i> , Distribution of B1, calla, β2 microglobulin and Ia on hematopoietic progenitors and hematopoiesis supporting cells (HSC) in short and long-term cultures, <i>Blood</i> , 60(5) (Suppl. 1):170a (Abstract 609) (1982)				
	Kaminski, M.G. <i>et al.</i> , "Radioimmunotherapy of B-cell lymphoma with [¹³¹ I] anti-B1 (anti-CD20) antibody, <i>NEJM</i> 329/7 (1993).				
	Liu, A.Y. <i>et al.</i> , Production of a Mouse-Human Chimeric Monoclonal Antibody to CD20 with Potent Fc-Dependent Biologic Activity. <i>J. Immun.</i> 139/10:3521-3526 (1987).				
	Marx, Antibodies made to order, <i>Science</i> 229 455 (August 1985).				
	Morrison, S.L., <i>et al.</i> , Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains, <i>PNAS</i> 81:6851-6854 (November 1984).				
	Morrison, Transfectomas provide novel chimeric antibodies, <i>Science</i> 229:1202-1207 (September 1985).				
	Munro, Uses of chimaeric antibodies, <i>Nature</i> 312:597 (December 1984).				
	Nadler, L.M., <i>et al.</i> , B cell origin of non-T cell acute lymphoblastic leukemia a model for discrete stages of neoplastic and normal pre-B cell differentiation, <i>J. Clin. Invest.</i> 74:332-340 (1984)				



	Nadler, L.M., et al., Anti-B1 monoclonal antibody and complement treatment in autologous bone-marrow transplantation for relapsed B-cell non-Hodgkin's lymphoma, <i>The Lancet</i> , Vol. II, pp. 427-431 (1984)				
	Nadler, L.M., et al., Serotherapy of a patient with a monoclonal antibody directed against a human lymphoma-associated antigen, <i>Cancer Research</i> , 40:3147-3154 (1980)				
	Neuberger, M.S. et al., A hapten-specific chimaeric IgE antibody with human physiological effector function, <i>Nature</i> 314:268 (March 1985).				
	Oettgen, H.C., et al., Further biochemical studies of the human B-cell differentiation antigens B1 and B2, <i>Hybridoma</i> , 2(1):17-28 (1983)				
	Ozato, K., et al., Monoclonal antibodies to mouse MHC antigens III. Hybridoma antibodies reacting to antigens to the H-2 ^b haplotype reveal genetic control of isotype expression, <i>J. Immunology</i> , 126(1):317-321 (1981)				
	Press et al., Monoclonal antibody 1F5 (Anti-CD20) serotherapy of human B cell lymphomas, <i>Blood</i> 69(2):584-591 (1987)				
	Press, O.W. et al., "Radiolabeled-antibody therapy of B-cell lymphoma with autologous bone marrow support." <i>New England Journal of Medicine</i> 329/17: 1219-12223 (1993).				
	Press, O.W. et al., "Treatment of refractory non-Hodgkin's lymphoma with radiolabeled MB-1 (anti-CD37) antibody, <i>J. Clin. Onc.</i> 7/8:1027-1038 (1989)				
	Reff, M., et al., Depletion of a B cells <i>in vivo</i> by a chimeric mouse human monoclonal antibody to CD20, <i>J. Cellular Biochem., Suppl.</i> 17E:260 (Abstract T103) (1993)				
	Reff, M., et al., Depletion of B cells <i>in vivo</i> by a chimeric mouse human monoclonal antibody to CD20, <i>Blood</i> , 83(2):435-445 (1994)				
	Robertson, M.J., et al., Human bone marrow depleted of CD33-positive cells mediates delayed but durable reconstitution of hematopoiesis: Clinical trial of MY9 monoclonal antibody-purged autografts for the treatment of acute myeloid leukemia, <i>Blood</i> , 79(9):2229-2236 (1992)				
	Robinson, R.D. et al., "Chimeric mouse-human anti-carcinoma antibodies that mediate different anti-tumor cell biological activities," <i>Hum. Antibod. Hybridomas</i> 2:84-93 (1991).				
	Sahagan et al., A genetically engineered murine/human chimeric antibody retains specificity for human tumor-associated antigen, <i>J. Immunol.</i> 137:1066-1074 (1986).				
	Scharff, M., The synthesis, assembly, and secretion of immunoglobulin: A biochemical and genetic approach, <i>Harvey Lectures</i> 69:125-143 (1974).				
	Schlom J., et al., Advantage of dose fractionation in monoclonal antibody-targeted radioimmunotherapy, <i>J. Natl. Cancer Inst.</i> , 82(9):763-771 (1990)				
	Shulman, M. et al., A better cell line for making hybridomas secreting specific antibodies, <i>Nature</i> 276:269 (1978).				
	Smeland, E.B., et al., Activation of human B cells: Alternate options for initial triggering and effects of nonmitogenic concentrations of anti-IgM antibodies on resting and activated cells, <i>J. Immunology</i> , 138(10):3179-3184 (1987)				
	Srivastava, S.C., et al., Progress in research on ligands, nuclides and techniques for labeling monoclonal antibodies, <i>Nucl. Med. Bio.</i> 18(6): 589-603 (1991).				
	Sun, L.K. et al., Chimeric antibodies with 17-1A-derived variable and human constant regions, <i>Hybridoma</i> 5/1:517 (1986).				
	Tan et al., A human-mouse chimeric immunoglobulin gene with a human variable region is expressed in mouse myeloma cells, <i>J. Immunol.</i> 135:8564 (November 1985).				
	Tedder, T.F., et al., The B cell surface molecule B1 is functionally linked with B cell activation and differentiation, <i>J. Immunology</i> , 135(2):973-979 (1985)				
	Urlaub, G. et al., Effect of gamma rays at the dihydrofolate reductase locus: deletions and inversions." <i>Som. Cell & Mol. Gen.</i> 12/6:555-566 (1986).				
	Valentine, M.A. et al., Phosphorylation of the CD20 phosphoprotein in resting B lymphocytes, <i>J. Biol. Chem.</i> 264(19):11282-11287 (1989).				
	Wessels, B.W., et al., Radionuclide selection and model absorbed dose calculations for radiolabeled tumor associated antibodies, <i>Med. Phys.</i> , 11(5):638-645 (1984)				

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.